SESSION 5: MINERAL METABOLISM AND METABOLIC BONE DISORDERS

(Dr Duncan Bassett)

#### LECTURE 1: MINERAL HOMEOSTASIS

**Learning objectives**

1. Principal organs involved in calcium and phosphate metabolism
2. Understand the functions of calcium in the body
3. Mechanism of action of PTH
4. Regulation of PTH synthesis and secretion
5. How 1,25(OH)2D is synthesized
6. Mechanism of action of 1,25(OH)2D
7. Regulation of vitamin D metabolism
8. Negative feedback loops involved in calcium homeostasis
9. Functions of phosphate in the body
10. Mechanism of action of FGF23
11. Negative feedback loops involved phosphate homeostasis